## **North Carolina**

# Demonstrating Effective Partnership and Collaboration Between Research Institutions and Cancer Registries

#### **Public Health Problem**

Breast cancer is the second most commonly diagnosed cancer and the second leading cause of cancer-related deaths among women in the United States. In 2002, an estimated 1,200 women in the United States died of breast cancer, and approximately 5,900 new cases were diagnosed.

#### **Evidence That Prevention Works**

Since the late 1970s, major advances have occurred in detecting and treating breast cancer; however, there is much that the health community does not know about the different types of breast cancer, the complexities surrounding risk factors, and causes of this disease. To control this disease, lessen its impact on thousands of American women each year, and address differences among racial and ethnic groups in breast cancer incidence and deaths, more research is needed. Information derived from statewide, population-based cancer registries enhances such research efforts.

#### **Program Example**

Data from the North Carolina Central Cancer Registry were used in two special research projects at the University of North Carolina Lineberger Comprehensive Cancer Center. The Carolina Breast Cancer Study (CBCS) and the Carcinoma Study are multiyear, population-based, case-control studies designed to discover new risk factors for breast cancer. As part of the Specialized Program of Research Excellence (SPORE), the National Cancer Institute funds both studies. The CBCS examined invasive breast cancer and enrolled approximately equal numbers of African American and white women; half the women were under age 50, and the other half were aged 50 years or older, which meant that the CBCS had sufficient numbers to examine differences in breast cancer incidence and risk by race and age. Participants in the Carcinoma Study had preinvasive breast cancer, and about 20% were African American. Using data from in-depth interviews and biologic samples, these studies examined environmental, behavioral, and genetic risk factors that influence breast cancer development.

### **Implications**

Increasing the knowledge base for breast cancer through research studies such as the ones conducted at the University of North Carolina Lineberger Comprehensive Cancer Center is essential in reducing the number of deaths from breast cancer in the United States. High-quality cancer data from state central cancer registries are critical to advancing epidemiologic, clinical, and health services research to reduce the burden of breast cancer among U.S. women. Ongoing data-sharing efforts between cancer registries and research institutions will ensure that progress in this important health arena continues.